STANDARD OPERATING PROCEDURE
Instructions for Use of Nutech 2703 Auto Air Sampling Device

KEY WORDS

air sampling, Nutech 2703 air sampler

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1.0 Purpose

This standard operating procedure describes how to collect passive air canister samples with the Nutech 2703 auto air sampling device for the Department of Pesticide Regulation's Air Program. These procedures are written for taking a 24-hour sample using a 6-L SUMMA canister. However, these procedures can be adjusted based on the needs of the study.

For additional information on the Nutech 2703, please refer to the Nutech 2703 Operational Manual.

2.0. Software Installation

- Laptop
  - The Nutech 2703 controller requires specific software that can be installed on your work issued laptop by a DPR staff member. Contact your supervisor, study lead, or field coordinator for further instructions on the required software installation for field use.
- Mobile Application
  - iPhone
    - The Nutech 2703 mobile application is available for Apple products through the App Store. For iPhone users, go to the App Store and search for the Nutech 2703 application and download.
  - Android Nutech App:
    - Download the Dropbox app. If you do not have a Dropbox account, make one using your DPR email address.
    - Contact your supervisor, study lead, or field coordinator for the link to the Android Nutech App. The link will be texted to you.
    - Click the link. You will be asked to SAVE or EXPORT the .zip file. Choose EXPORT.
    - Choosing export will prompt you to pick an app to export to. Choose your Dropbox app.
    - Sign into your Dropbox app (if asked) and you should see your zip file as shown below (Figure 1).

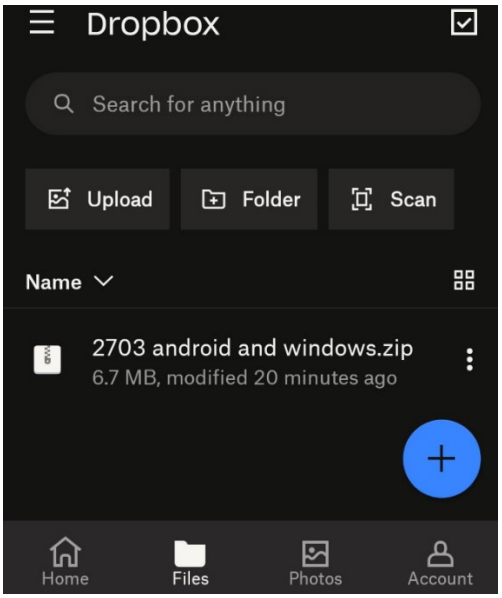

Figure 1: Exporting the Nutech app using Dropbox.

- Note: If you cannot access Dropbox to unzip your file you can find your downloaded zip file in the My Files app within Android.
- Download the WinZip app to unzip your file.
- Using Dropbox click on the file and extract (Figure 2).

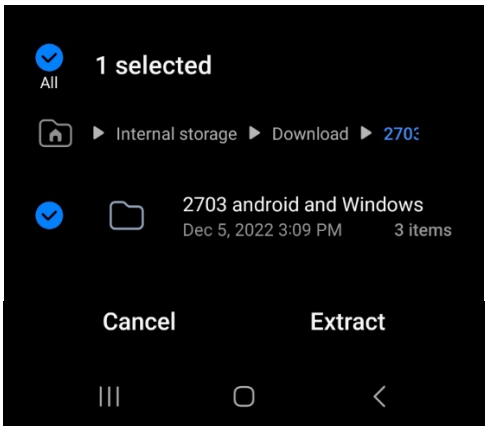

Figure 2: Extracting the Nutech 2703 app.

- Once extracted, your files now sit in the My Files app. Click on the file and you should see three items (Figure 3).

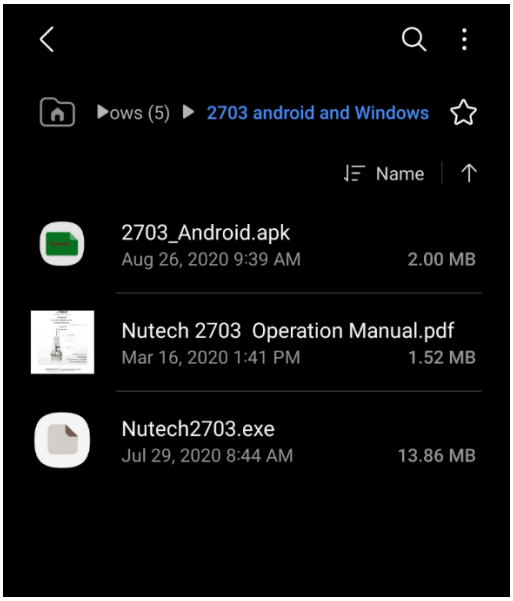

Figure 3: Extracted files. Choose the "2703.Android.apk" for download.

- Click on the 2703_Android.apk file to initiate downloading of the Nutech 2703 app to your phone app collection. Application set up is now complete.

Note: You may need to allow permissions to download the 2703_Android.apk app. In this case you should allow permissions for the app managing the download. Your Android phone may automatically use the "My Files" app to do so. Keep in mind if you are using Dropbox, the Dropbox app only held the zip file, My Files app, and the extracted contents so be aware of where you are putting your extracted files.

3.0. Materials

The following materials are needed:

- 6-L SUMMA canister
- Nutech 2703 controller (located at sampling site in a Shelter One enclosure shown in Figure 4)
- DPR or County Agricultural Commissioner (CAC)-issued laptop with Nutech 2703 installed software, or the Nutech 2703 mobile app for iPhone and Android devices.
- ALICAT Scientific low flow meter

- Calibration tubing and tip (silicone tubing with a series of smaller reducing tubing to connect to 1/8-inch outer diameter PTFE tubing)
- Two 9/16” wrenches
- Field Data Sheets (FDS)

Figure 4: Nutech 2703 controller inside of the Shelter One enclosure.

3.1 Nutech 2703 Touch Panel and Display Window

- The Nutech 2703 touch panel (Figure 5) is used to set up a manual sampling event. The display window will show the specific details related to the sampling event such as, but not limited to, date/time, flow rate, and duration (Figure 6). The display window will show sampling details whether you set it up on a laptop, iPhone/Android, or manually.

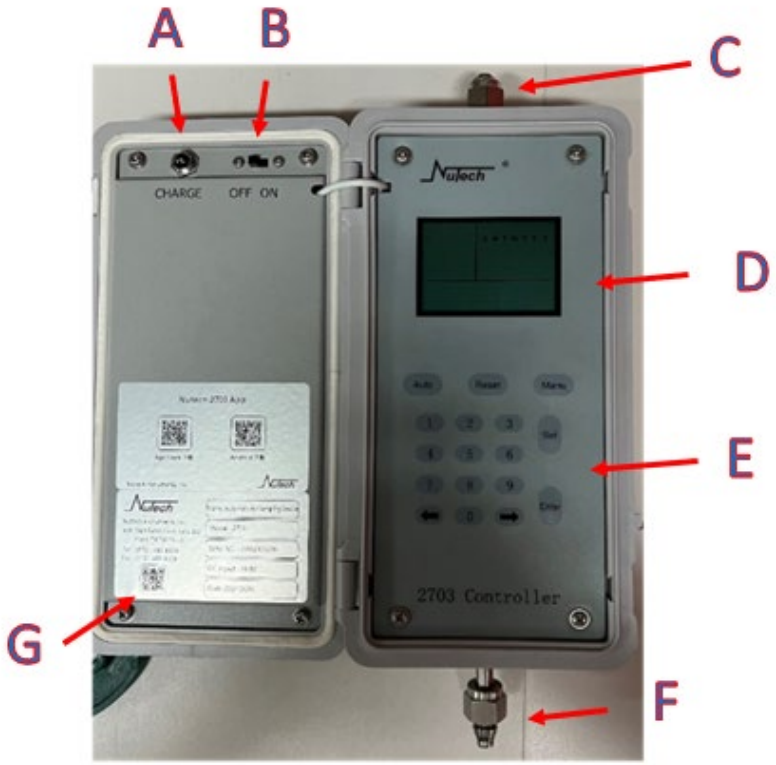

Figure 5: Nutech 2703 controller touch panel.

A. Power charge port
B. Power switch [ON/OFF]
C. Air inlet
D. LCD screen
E. Digital (Numeric) keypad
F. Air outlet
G. QR code

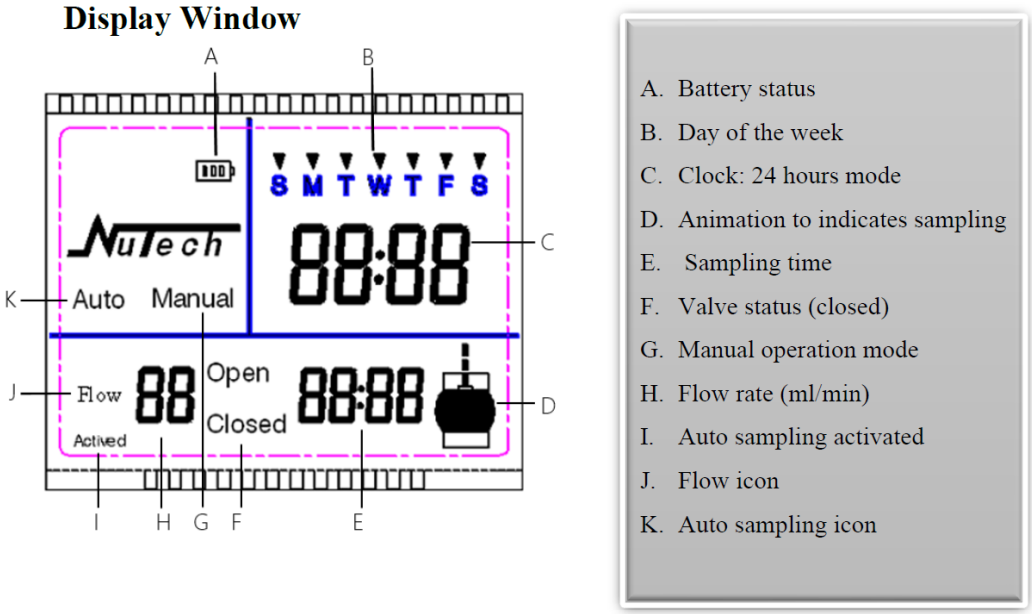

Figure 6: Display window of the Nutech 2703 controller.

3.2 Charging the Nutech 2703 Controller

- Nutech 2703 controllers are housed in a Shelter One and should be plugged in and left in the [ON] position to remain fully charged between sampling events.
- If the controller requires charging, plug the provided power supply into the power charge port on the top left side of the Nutech 2703 controller's open cover. Turn the [ON/OFF] power switch to the [ON] position (Figure 7).
- The power switch must be [ON] to enable charging. A RED light on the AC power adapter indicates the controller is charging. When the light on the AC adapter turns GREEN, the controller has indicated it is fully charged. The instrument must always be connected to a power source when sampling.

Figure 7: The Nutech 2703 controller is connected to a power source and is turned ON.

4.0. Setting Up a 6-L SUMMA Canister

4.1. Canister Set-Up

- Remove the brass cap nut from the canister valve using a 9/16” combination wrench to attach the Nutech 2703 controller’s tubing with nut to the 6-L SUMMA canister.
- Connect the Nutech 2703 controller tubing with nut to an evacuated 6-L SUMMA canister (Figure 8 – Left Image) and manually tighten the nut with your fingers to ensure the threading is lined up correctly. Use two 9/16” combination wrenches to tighten down (in opposite directions) the Nutech 2703 tubing with nut to the canister. One wrench should be used on the nut of the Nutech 2703 tubing, and the other on the Swagelok fitting below the pressure gauge (Figure 8 – Right Image).

Figure 8: Nutech 2703 tubing with nut connected to a 6-L SUMMA canister.

- Once the Nutech 2703 tubing is securely attached to the canister, open the canister valve by hand by turning the blue or green knob on the 6-L SUMMA canister counterclockwise.

- The Nutech 2703 controller may be programmed for a sampling event after it has been attached to a canister. The Nutech 2703 controller can be programmed three ways: Nutech 2703 software installed on a laptop (Section 5.0), Nutech 2703 application on your iPhone or Android (Section 6.0), and the Nutech 2703 manual touch screen panel (Section 7.0).

5.0 Auto Sampling Operation Procedures with Computer Control – Preferred Method for Set Up

- The Nutech 2703 computer software should be installed prior to a sampling event. Contact the study lead/ field coordinator, or designated equipment staff member to arrange for installation.
- Follow instructions in Section 4.1 on how to connect the Nutech 2703 controller to a 6-L SUMMA canister.

5.1 Turning on the Nutech 2703 Controller

- On the open cover of the device, turn on Nutech 2703 controller (if not already on) by moving the [ON/OFF] switch to the [ON] position. From that point, the Nutech 2703 timer will stay on for approximately 120 seconds. After that, the Nutech 2703 controller defaults to sleep mode and will not be accessible to put in parameters unless the ENTER key is pressed to wake the Nutech 2703 controller out of sleep mode.

5.2 Wi-Fi Connection

- A wireless connection must be made between your laptop and the Nutech 2703 controller. The Nutech 2703 controller has a built-in Wi-Fi router. On your laptop, search among Wi-Fi sources for the Nutech 2703 Wi-Fi connection. The connection name will be the serial number of the Nutech 2703 controller (available on the open cover of the device e.g., “N2703-00XX” or a serial number such as “110122013”). Connect to the Nutech 2703 Wi-Fi (Figure 9). The required password is N2703888. All Nutech 2703 controllers have the same password.

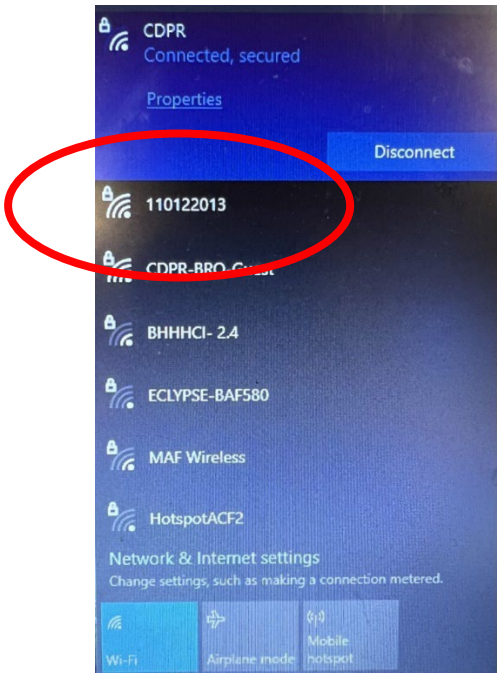

Figure 9: Wi-Fi connection for the Nutech 2703 controller.

- Once the connection starts between the Nutech 2703 controller and your laptop, double-click on Nutech 2703 application installed on the laptop. After the software application is opened, if the Wi-Fi connection has linked successfully then "Unlinked" (to the right of the date and time) on your computer application will change to "Linked" (Figure 10). Note: Once you start to make the Wi-Fi connection you can open the application.

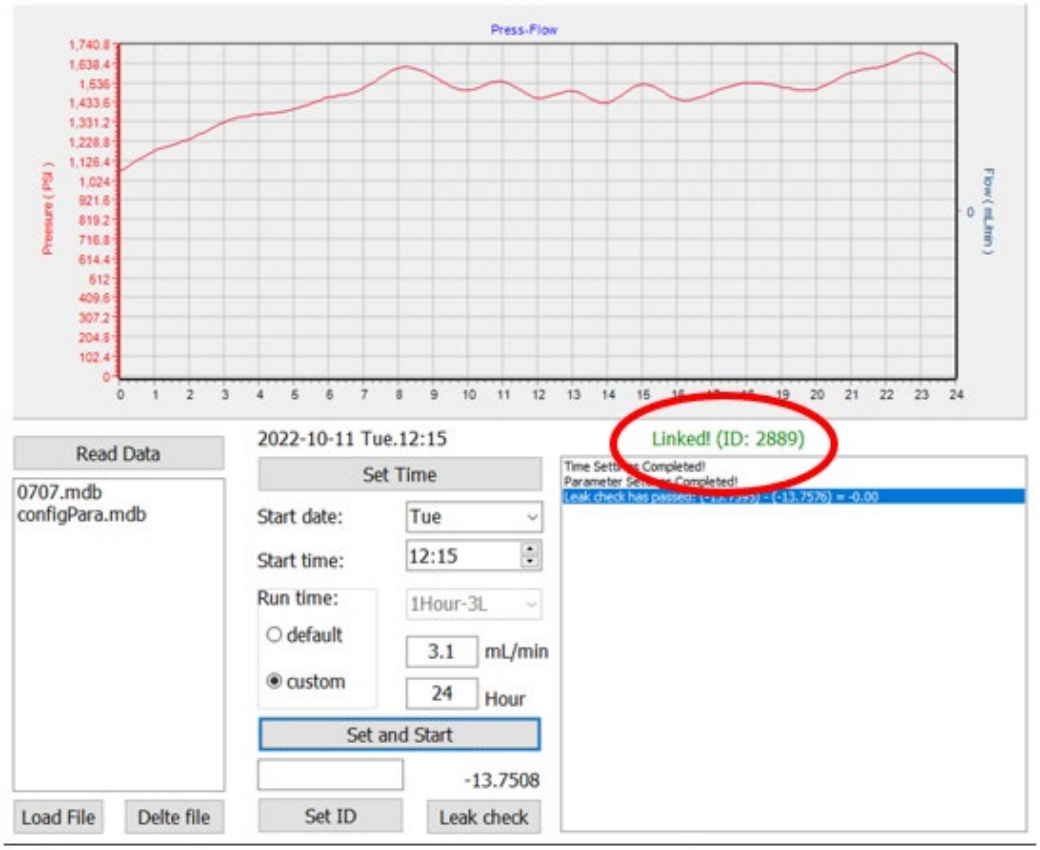

Figure 10: Linked home screen on the software application of the Nutech 2703 controller.

5.3 Obtaining the Initial Flow Rate and/or Adjusted Flow Rate

To get the target flow rate of 3.3 mL/min the following steps should be completed to start a sample run.

- Open the canister valve (if not already open).
- From the Nutech 2703 controller's home screen select Set Time, which synchronizes the time between the field computer and the Nutech 2703.
- Select Start date and Start time. Select Today and a time two to three minutes from the current time.
- In the Run time box Select Custom. Enter parameters: (3.3 ml/min, 24 Hour).
- Select Set and Start.

Based on the time you selected the Nutech 2703 controller will start running at a flow rate of 3.3 mL/min for 24 hrs. Once the controller starts, a leak check will automatically run. Please allow 2 – 3 minutes for the leak check to finish and the flow to stabilize before taking a flow reading.

- Using an ALICAT Scientific low flow meter measure the flow rate. If the flow rate is 3.3 ml/min +/- 10% (2.97 – 3.63 ml/min) the sample is now set up. Continue to Section 8.0.
- If the flow is out of the acceptable range, follow the steps below to adjust flow.
    - On the Nutech 2703 controller's home screen the box next to mL/min you will enter the adjusted flow rate based on Table 1. For example, if the initial flow rate was 2.8 mL/min measured using the ALICAT low flow meter, you will enter the flow rate of 3.9 in the box next to mL/min on the Nutech 2703 controller's home screen.
    - Once the adjusted flow rate has been entered select Set and Start.
    - Based on the current time the sample has now started over. The elapsed minutes on the Nutech 2703 controller's touch panel will start over at 00:00.
    - Before taking a new flow reading a leak check will be performed automatically. When one minute has passed, the sample will begin taking a flow. Please wait 2 – 3 minutes for the flow to stabilize before taking a new flow reading.
    - If the flow is within a valid range continue to Section 8.0. If not, repeat until a valid flow range is obtained.
- See Section 8.0 on how to record data on the field data sheet (FDS) at the beginning and end of a sampling event.

Table 1. Adjusted Flow Rates

Initial Measured Volumetric Flow Rate Using ALICAT Flow Meter (mL/min)	**Adjusted Volumetric Flow Rate to be Set on the Regulator (mL/min)**
2.0	5.4
2.1	5.2
2.2	5.0
2.3	4.7
2.4	4.5
2.5	4.4
2.6	4.2
2.7	4.0
2.8	3.9
2.9	3.8
3.0	3.6
3.1	3.5
3.2	3.4
3.3	3.3
3.4	3.2
3.5	3.1
3.6	3.0
3.7	2.9
3.8	2.9
3.9	2.8
4.0	2.7

6.0 Auto Sampling Operation Procedures with your iPhone or Android.

Follow instructions in Section 4.1 on how to connect the Nutech 2703 controller to a 6-L SUMMA canister prior to set up.

6.1 Wi-Fi Connection

Open the Wi-Fi settings on your iPhone or Android device and connect the Nutech 2703 controller to the Nutech 2703 Wi-Fi network (for example: 27032106294). Your phone should automatically connect to the Wi-Fi. The password is N2703888. All Nutech 2703 controllers have the same password. Once connected to the Wi-Fi, open the Nutech 2703 controller's application on your phone.

Note: If the Wi-Fi in your settings shows you are connected and the application does not, you will need to close out the application and reopen it again.

6.2 Obtaining the Initial Flow Rate and/or Adjusted Flow Rate

To get the initial flow rate/ adjusted flow rate of 3.3 mL/min, the following steps should be completed to start a sample run.

- Open the canister valve (if not already open).
- From the Nutech 2703 application's home screen select Set Time, which synchronizes the time between the application and the Nutech 2703 controller (Figure 12).
- Select Choose Start Time. Select Today and a time two to three minutes from the current time.
- In the Run time box select Custom. Enter parameters: (3.3 ml/min (flow), 24 Hour).
- Select Send Parameter.
- Select Leak Check. An automatic leak check will be performed.

Based on the date and time you selected, the Nutech 2703 controller will begin running at a flow rate of 3.3 mL/min, 24 hrs. Once the controller starts, a leak check will automatically run. Please allow 2 – 3 minutes for the leak check to finish and the flow to stabilize before taking a flow reading.

- Using an ALICAT Scientific low flow meter, measure the flow rate. If the flow rate is 3.3 ml/min +/- 10% (2.97 – 3.63 ml/min) the sample is now set up. Continue to Section 8.0.
- If the flow falls out of the acceptable range, follow the steps below to adjust flow.
    - On the Nutech 2703 controller's phone application's home screen press the Select Running time box and select Custom, then Yes. Next enter the adjusted flow rate based on Table 1 followed by 24hrs, then select Yes. For example, if the initial flow rate was 2.8 mL/min on the ALICAT low flow meter you will enter the rate of 3.9 mL/min in the box followed by 24 hrs. on the Nutech 2703 controller's phone application's home screen.

- Once the adjusted flow rate has been entered select Send Parameter, followed by Leak Check.
- Based on the current time the sample has now started over. The elapsed minutes on the Nutech 2703 controller's touch panel will start over at 00:00.
- Before taking a new flow reading a leak check will be performed automatically. When one minute has passed, the sample will begin taking a flow. Please wait 2 – 3 minutes for the flow to stabilize before taking a new flow reading.
- If the flow is within a valid range continue to Section 8.0. If not, repeat until a valid flow range is obtained.

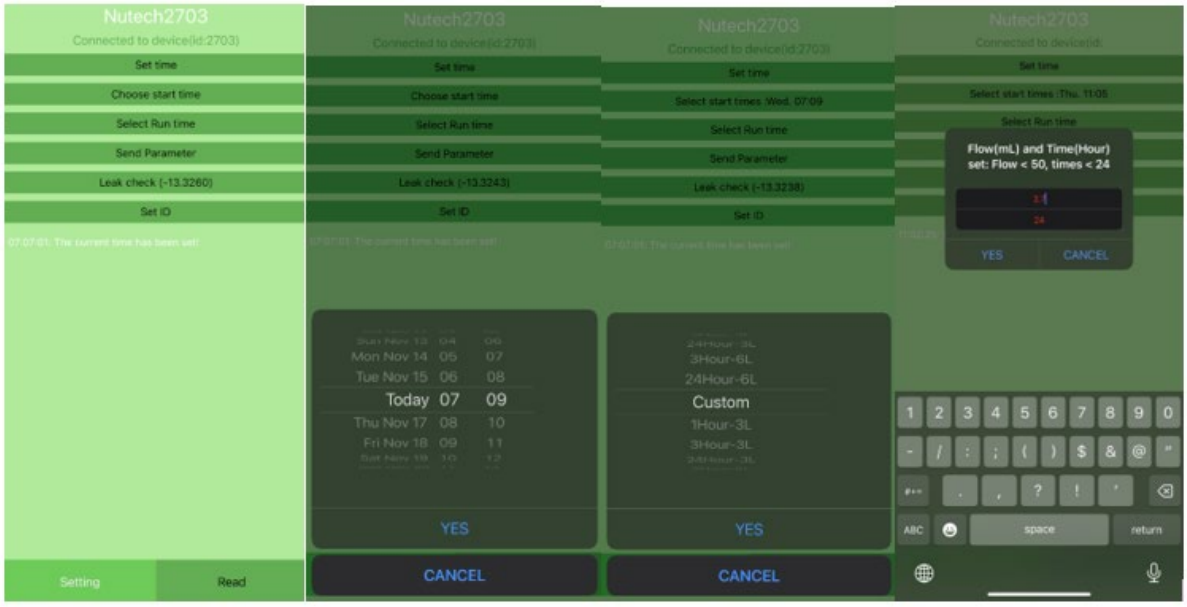

Figure 11*:* Set-up process for linking the phone application to the Nutech 2703 controller, setting the date/time, and setting the Custom flow rate/Adjusted Flow rate.

- The left picture in Figure 12 shows how the Nutech 2703 application will look when the sample has started to run. When returning 24 hours later, the Nutech 2703 application will look like the picture on the right. Note the difference in sampler canister pressures (located in parentheses next to Leak Check) from the left picture to the right.

Figure 12: Starting and ending screens on the Nutech 2703 controller's phone application.

Record all required information on the FDS. See Section 8.0 for the required information for the FDS.

7.0 Manual Auto Sampling Operation Procedures using the Controller's Touch Panel.

Follow instructions in Section 4.1 on how to connect the Nutech 2703 controller to a 6-L SUMMA canister.

- Open the canister valve (if not already opened) and turn on the Nutech 2703 controller by turning the [ON/OFF] switch to the [ON] position located on the front cover panel (Figure 13). The controller will stay on for approximately 120 seconds. After that, the Nutech 2703 controller defaults to sleep mode, and can be wakened only be pressing the Enter key.

Figure 13: ON/OFF button on the Nutech 2703 controller.

7.1 Setting the Real-Time/ Clock

- Press the Set key TWICE to set the current time and day of the week. The digits on the screen will start flashing.
- Using the numeric keys, set the clock to military time. If necessary, the left or right arrow keys can be used to make a correction.
- Once the minutes are entered, the day of the week will start flashing. Use the left or right arrow key and move the cursor to the desired day.
- Press the Enter key to complete the day and time settings (Figure 14).

Note: During the setup another way to make corrections is by turning the Nutech 2703 controller off and back on to start over (this is the easiest way to correct mistakes in the input settings). The time and day of the week needs to be set each time the Nutech 2703 controller is turned on.

Figure 14: Manually programming the Nutech 2703 controller with the date and time.

7.2 Obtaining the Initial Flow Rate/ Adjusted Flow Rate

An initial flow rate and/or adjusted flow rate will need to be obtained to start a scheduled sampling event. Follow the setup process from Sections 7.3 – 7.6 to program a scheduled run. Once the run has begun, use an ALICAT Scientific low flow meter to measure the flow rate. If the initial flow at the end of the setup is 3.3 +/- 10% (2.97 – 3.63 ml/min), set up is now complete. If the flow rate is not 3.3 +/- 10% (2.97 – 3.63 ml/min) make a note of the reading and use Table 1 to obtain the adjusted flow rate. This will be the value used when setting up the Small Flow Rate in Section 7.6 (during the adjusted flow rate set-up).

7.3 Setting the Start Time (Valve OPEN)

- Press the Set key ONCE to begin setting the flow rate.
- When taking a 24-hour sample with a 6-L SUMMA canister, the flow should be initially set to 3.0 ml/min. To do so, enter "0" followed by "3" on the touch panel. The Nutech 2703 controller recognizes number "03" as a value of 3.0 ml/min flow rate (Figure 15).

Figure 15: Manually setting the flow rate on the Nutech 2703 controller.

- Once the flow rate is set, the word Open will begin flashing, indicating that we are setting the time to open the valve and setting the opening flow rate. Press Enter to confirm open valve function and flow rate.
- The time will start flashing, indicating that the time is ready to be set. Using the numeric keys, enter the sampling start time. Then use the left and right arrow keys to select the desired start day, followed by Enter to finish setting up the sampling start time. The display will return to the clock setting.

7.4 Setting the Stop Time (Valve CLOSED)

- Press the Set key ONCE to begin setting the flow rate again for the stop time (we need to set the Flow Rate for both steps of Start and End time).
- Set the flow rate to 3.0 ml/min by entering "0" followed by "3" on the screen. Once the flow rate is set, the word Open will begin flashing indicating to set the valve function.
- Use the left arrow key to switch to the Closed status. Once the word Closed appears, Press Enter to confirm this function.

- Next, the time will start flashing, indicating the time is ready to be set. Using the numeric keys, enter the sampling stop time (Figure 16). Use the left and right arrow keys to select the desired day, followed by Enter to confirm the stop time for the sampling event. The display will return to the clock setting.

Figure 16: Manually setting the stop time and flow rate.

7.5 Starting and Stopping a Sampling Event

- Next, press Auto ONCE to start the auto operation.
- The word Activated will be displayed in the bottom left-hand corner of the display panel (See red circle in Figure 17) indicating that at the set start time and day the valve will open, and sampling will begin. At the set stop time and day, the valve will close automatically, and sampling will end.

Note: Text “Activated” is quite small.

Figure 17: Activated Nutech 2703 controller.

7.6 Setting a Small Flow Rate (<10ml/min)

This step is very important to follow. A manual set-up requires this additional step to accurately set the correct flow rate. If you do not set the small flow rate, the sample will not start.

- Press Set once to begin setting the flow rate. Then, **press the left arrow key once** to enter the small flow rate setting (if you do not press the left arrow you will need to start over).
- The FLOW icon will start flashing, which indicates you have successfully entered the small flow rate setting. Now, 00 means 0.0 ml/min. If you want to set the flow rate to 3.3 ml/min, you will enter 33, which means 3.3 ml/min for the flow rate.
- Once you set the flow rate the word Open will start flashing for you to set the valve function. Press Enter to confirm this function. The time will begin flashing, indicating that it is ready. Using the digital keys, enter the sampling start time. Use the right and left arrow keys to select the

desired day, followed by Enter to finish the sampling start time. The display will return to the clock setting. Then press Auto. Set Up is now complete (Figure 18).

Figure 18: Nutech 2703 controller has started a scheduled sampling event.

Based on the date and time you selected, the Nutech 2703 controller will begin running at a flow rate of 3.3 mL/min for 24 hrs. Once the controller starts, a leak check will automatically run. Please allow 2 – 3 minutes for the leak check to finish and the flow to stabilize before taking a flow reading.

- Using an ALICAT Scientific low flow meter, measure the flow rate. If the flow rate is 3.3 ml/min +/- 10% (2.97 – 3.63 ml/min) the sample is now set up.
- If the flow falls out of the acceptable range, make a note of the flow reading and continue with the steps below.
- Stop the sample by turning the Nutech 2703 controller's [ON/OFF] switch to [OFF]. The canister valve does not need to be closed.
- Use Table 1 to determine the new flow rate. The Initial Measured Flow Rate Using ALICAT Flow Meter (mL/min) column is the one measured with the low flow meter, and the Adjusted Flow Rate to be Set on the Regulator (mL/min) column is the flow rate you will set on the Nutech 2703 controller.
    - For example: If the initial flow rate is reading 2.7 mL/min, the adjusted flow rate should be 4.0 mL/min.

After the adjusted flow rate has been determined the parameter settings should be made in the following order:

- Turn the Nutech 2703 controller to the [ON] position, reset the date and time following the process in Section 7.1.
- Follow the set-up process in 7.3 thru 7.6. Use the adjusted flow rate that was determined in the previous set up when setting up the small flow rate in Section 7.6. Once the small flow rate has been entered set up is now complete.
- Once the leak check is complete and the flow has stabilized a new flow reading can be obtained using the ALICAT low flow meter.

Note: See Section 8.1 and Section 8.2 on how to collect starting and ending flow rates, and other required information for the FDS.

Do not press any key on the panel once the controller is activated. It may interfere with the parameters you have provided. Once the sampling event has begun and the valve is in the open position (sampling is in progress), the Auto sign will be locked until the event is completed and the valve closes. **Please note that it can take several minutes for the flow to increase to the desired levels.**

8.0 Recording Information on the Field Data Sheet (FDS)

8.1 Sample Set Up

- Record Site Name, Crew, Start Date, Sample Number, Location Code, Time On, Machine ID #, DPR Canister Number, and Flow Meter Serial Number on the field data sheet.
- Record Starting Pressure on the Canister (should be -30" Hg on the canister's pressure gauge).
- Record Starting Sampler Pressure from the laptop or phone application. Record the pressure in psi. The starting pressure must be recorded on the FDS in psi. You can also convert the pressure on the FDS to inHg. Starting pressure values will vary. This value is located above the Leak Check box on the laptop application, or in parentheses next to Leak Check on the phone application. If a manual set up occurred, you will not have a starting sampler pressure.

Note: To convert psi you can multiply the ending psi by 2.036 inHg (for example: -13.3227 x 2.036 = -27.12 inHg). This value will be your starting sampler pressure.

- Connect an ALICAT scientific low flow meter affixed with a flow measurement adapter to the inlet of the PTFE tubing (Figure 19). Use the ALICAT low flow meter to Record Initial Flow. A valid

flow range should be +/- 10% of 3.3 ml/min (2.97 – 3.63 ml/min) (Remember that a flow of 3.3 ml/min will appear in the LCD screen as a "33".

Figure 19: Connection of the ALICAT Scientific low flow meter to take initial and ending flow rates.

- Sign your name in the Sample Started box along with the Date and Time the sample was started. Place the canister inside the enclosure and securely close the door to the Shelter One.

8.2 Sample Collection

- Return to the site prior to the end of sample period. Using the ALICAT Scientific low flow meter record the final flow reading on the FDS in the same manner that you measured the initial flow reading. Perform the final reading five to 10 minutes prior to the sample period ending.

- At the end of the sampling period, the Nutech 2703 controller will shut off automatically at 24 hours. The Open status will change to Closed (Figure 20). Note: The Nutech 2703 will instantly go into a sleep mode once the sample has stopped. To wake the controller, press Enter.
- Record the final pressure reading from the 6-L SUMMA canister's flow controller vacuum gauge on the FDS. A valid pressure reading should fall in the range of -4 and -10 inHg.
- To record the final sampler pressure, use your laptop or phone to connect to the Nutech 2703 software. Right above the Leak Check box (or in parentheses on the phone application) the pressure will be displayed in psi. Record the pressure in psi that is displayed on the sampler on the FDS. The pressure must be recorded in psi. A valid pressure reading should fall in the range of -2 and -5 psi (or -4 and -10 inHg for reference if converting to inHg).
- Close the canister valve by turning the blue or green knob clockwise.
- Record any other remaining information required on the FDS (End Date, any applicable Notes related to the sampling event, Sample Finished (date and time), and Sample Transport (date and time). If the sample was set up manually, please note that in the Field Notes section.
- Leave the Nutech 2703 controller powered on by keeping the [ON/OFF] switch to the [ON] position. Keep the Nutech 2703 controller connected to power.
- Remove the Nutech 2703 controller tubing with nut from canister with two 9/16" combination wrenches and reattach the canister brass cap nut with two 9/16" wrenches.
- Return all material not housed in the Shelter One to Bradshaw Regional Office, Ventura County Agricultural Commissioner's Office, or Santa Barbara County Agricultural Commissioner's Office.

Figure 20: Open and closed screens of the Nutech 2703 controller.

9.0 Downloading the Data using a Laptop

After a sampling event is complete you may be required to download the data, to do so select Read Data (Figure 21) on your laptop.

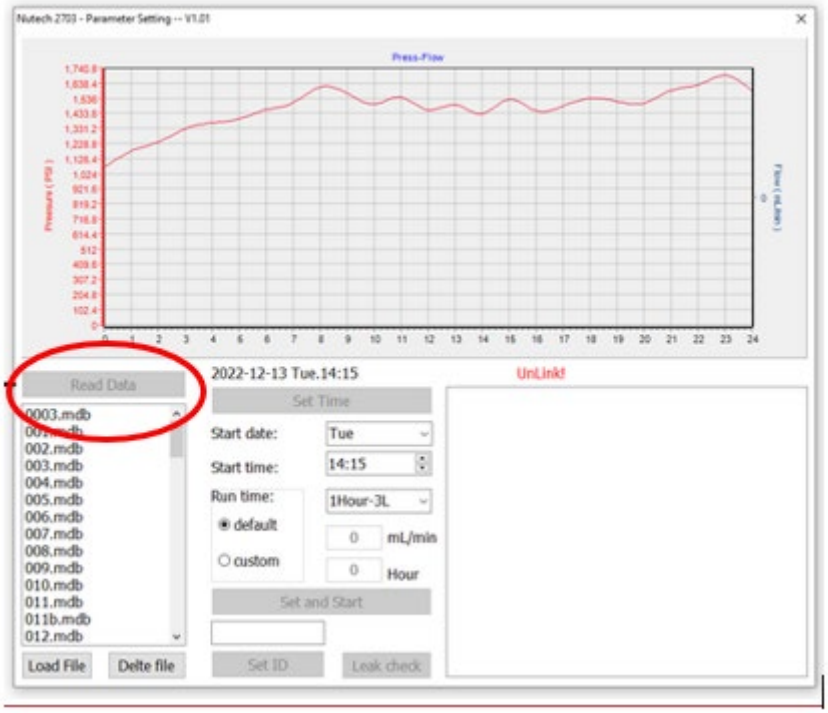

Figure 21: Downloading the flow rate and pressure data.

Next, give the data a file name. It can only be four characters. The chart in the software will update as the data is downloaded. Data can be viewed later with the regulator software or opened in Microsoft Access (Figure 22).

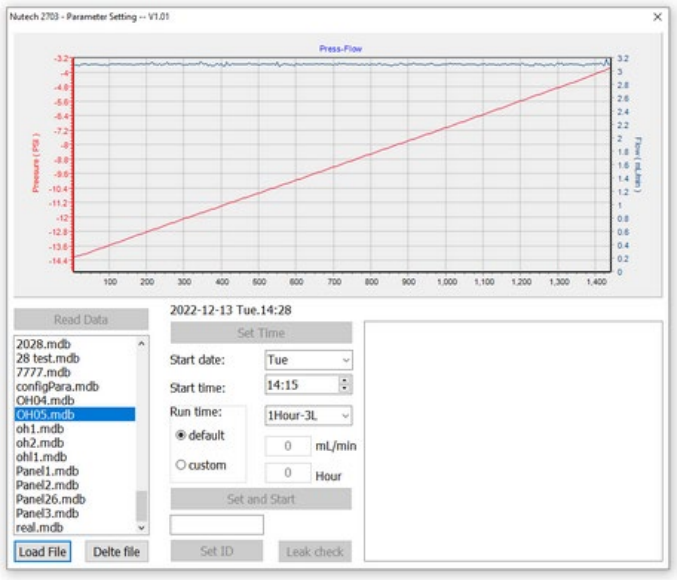

Figure 22: Successful download of flow rate and pressure data.

Sometimes there will be an error in the download (Figure 23). If this occurs the download will need to be redone and a new file name given.

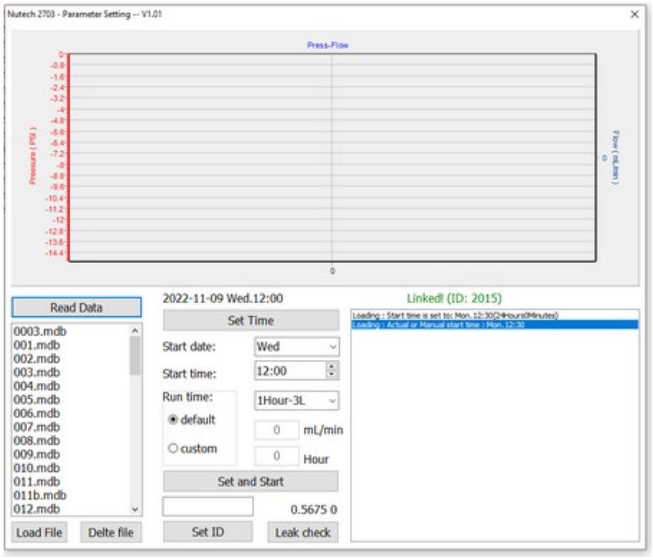

Figure 23: Unsuccessful download of flow rate and pressure data.

Once the data is successfully downloaded it can be opened in Access (Figure 24). This file will need to be sent to the designated data custodian after your sampling trip is complete.

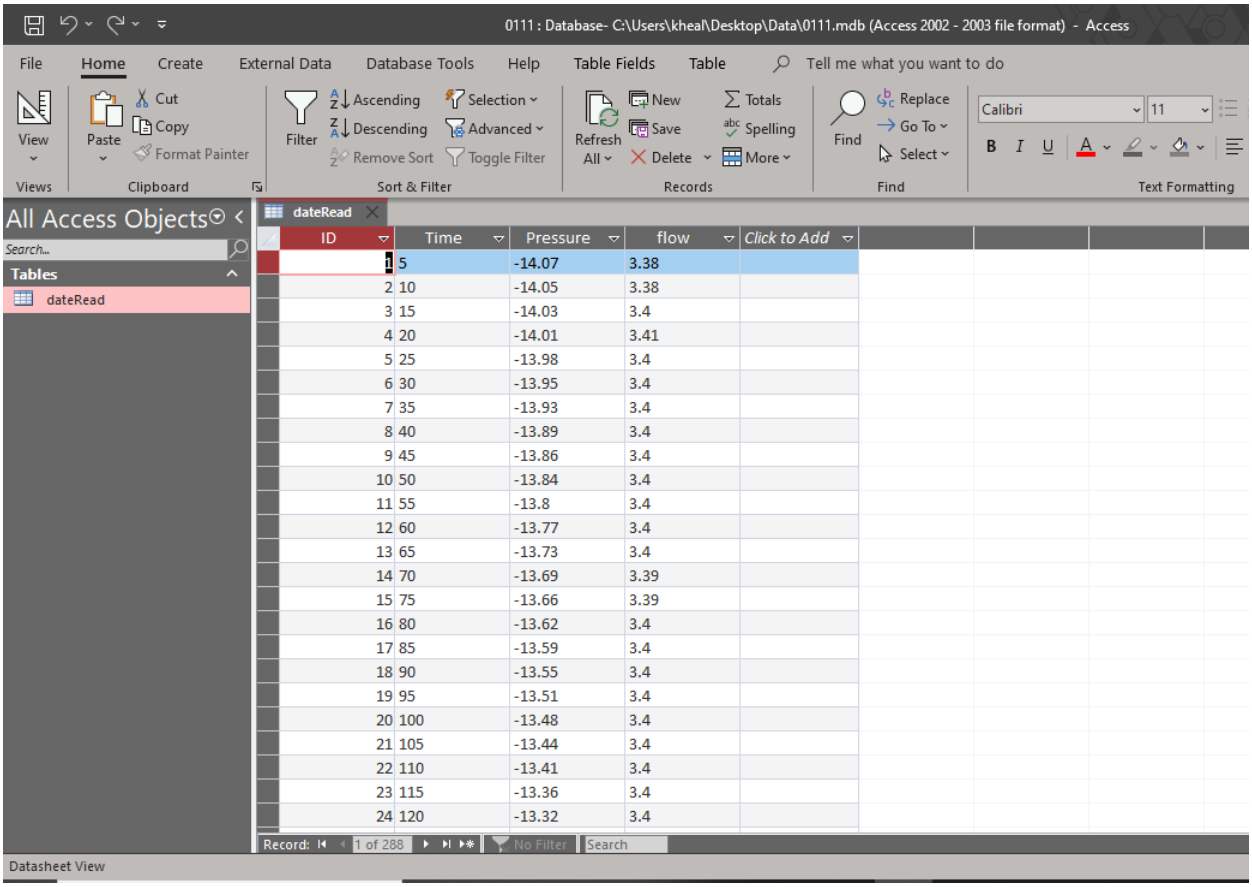

Figure 24: Downloaded data opened in Access.

10.0 Troubleshooting Guides

- If the power switch is on and you do not see the time on the panel screen, the Nutech 2703 controller is in sleep mode. Press the Enter key and the time will appear on the Nutech 2703 controller's screen.
- If the Nutech 2703 controller freezes, there is no response to the keys, or the clock on the display stops, press the reset button to restart.
- If the screen of the Nutech 2703 controller is entirely dark, it may be due to a lack of power in the battery and it needs to be charged.

- If Wi-Fi cannot be connected, restart the Nutech 2703 controller, or close out the window and re-open it. If the connection still fails, the Wi-Fi module may be damaged. Please contact the study lead or designated equipment staff member to arrange for repair and/or further troubleshooting.
- If the canister has reached the normal atmospheric pressure before the set time, the interface between the canister and the flow controller may be leaking air. You should check whether the interface is connected correctly. If there is no air leakage at the interface, it may be an air leakage inside the instrument. Please contact the study lead or designated equipment staff member to arrange for repair.